

Composts vs. peats: composts win

by RON HALL/ Sr Editor

Composts can improve soils and the establishment of turfgrass, including turfgrass for athletic fields and putting greens, says soil scientist Dr. Ed McCoy.

In fact, research suggests that, in some respects, composts out-perform native peats, a more traditional and widely-used soil amendment.

Composts are mixtures of decomposing vegetation or other organic materials. They're manufactured from a variety of organic waste sources, many of which previously would have been hauled to landfills.

Like peats, their primary function is to add organic matter to soils. Organic matter, explains McCoy, "buffers" turf from the environmental demands placed on it.

But very real physical and chemical differences exist between native peats and composts, says McCoy, an educator and researcher at The Ohio State University.

Composts have:

- ▶ less organic matter content than peats,
- ▶ finer texture than peats,
- ▶ lower cation exchange capacities, and
- ▶ higher levels of soluble salts. (This may not be as big a problem as it seems if irrigation leaches the salts through the soil.)

McCoy has, for several years, been testing composts,

all of which have different characteristics although not, obviously, as broad as their differences with peats.

He's learned that composts: increase soil organic matter, reduce soil bulk density, increase the infiltration rate of heavy soils, and they can "assist" in suppressing some turf diseases.

While composts are increasingly being used to amend soils of home lawns and athletic fields, their use in sand USGA-specification putting greens is still being investigated.

"There's a real concern that these composts—with low organic matter contents (relative to native peats) and fine textures—may not perform suitably in a situation such as a putting green where we have to have very rapid water drainage, rapid infiltration, and we want to maintain large pore openings," says McCoy.

To help shed light on that concern, McCoy tested six rootzone mixes: three contained composts and three used native peats. He blended the six amendments—at one percent and three percent by weight—with sand to produce USGA-type rootzone mix.

He packed 12 inches of each mix into identical columns, and, by using a layer of coarse material, created a perched water table in each column. Then he seeded each column with identical, and recommended, rates of creep-



Ed McCoy sees more use in turfgrass for composts.

ing bentgrass.

The mixes containing the composts produced better germination and early growth

than the mixes containing the peats, says McCoy. Also, the mixes with composts were significantly more permeable.

During drought and traffic tests the turfgrass growing in the compost mixes performed at least as well, and often better, than turfgrass growing in the peat mixes.

"I've had lots of surprises working with compost. It seems to be performing very well," says McCoy. "I think there's a real opportunity for the use of those materials (composts) in the future."

McCoy spoke at the OSU Short Course earlier this year from which this report was compiled. □

Landscape certification: coming to your state?

Six state and regional landscape associations are looking into the Certified Landscape Technician tests being used in California, and 13 more states have already adopted a similar test.

Landscape associations representing Utah, Texas, Colorado, Illinois, Wisconsin and Maryland/Virginia/D.C. were on hand when the California Landscape Contractors Association administered its CLT test earlier this year.

John Riffel and Eric Schultz of the Associated Landscape Contractors of Colorado express enthusiasm about certification as a change agent. "It's definitely helped our industry," they say. "We're starting to see the effects on the commercial side, and we expect the demand for CLTs in the residential markets will follow."

The CLT test was developed 13 years ago, sold to the Associated Landscape Contractors of America two years ago, and has grown each year.

"This is our best test ever," says Henry Buder, CLCA's state